

Ammonium iron(II) sulfate standard solution 2.8 mmol/I according to EN ISO 7393-1:2000, DEV G4-1 adv				
Revision date: 28.04.2022	Product code: 2071	)	Page 1 of 8	
SECTION 1: Identification of the substance/mixture and of the company/undertaking				
1.1. Product identifier Ammonium iron(II) sulfate standard solution 2.8 mmol/l according to EN ISO 7393-1:2000, DEV G4-1 adv				
1.2. Relevant identified uses of the	substance or mixture and uses advised	l against		
Use of the substance/mixture Laboratory chemicals Industrial uses: Uses of substances as such or in preparations at industrial sites Professional uses: Public domain (administration, education, entertainment, services, craftsmen)				
Uses advised against				
Do not use for private purpos	es (household).			
1.3. Details of the supplier of the s	afety data sheet			
Company name:	Fa. Bernd Kraft GmbH			
Street:	Stempelstraße 6			
Place:	D-47167 Duisburg			
Telephone:	0203/5194-0	Telefax: 0203/5194-290		
e-mail:	info@berndkraft.de			
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117		
e-mail:	produktsicherheit@berndkraft.de			
Internet:	www.berndkraft.de			
Responsible Department:	Abteilung Produktsicherheit			
<u>1.4. Emergency telephone</u> number:	For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)			
Further Information				
This product is a mixture. REACH Registration Number see section 3.				
SECTION 2: Hazards identification				

# 2.1. Classification of the substance or mixture

#### Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

# 2.2. Label elements

#### 2.3. Other hazards

No data available

# **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

Chemical characterization Mixtures in aqueous solution

# Hazardous components

none (according to Regulation (EC) No 1907/2006 (REACH))

# **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).



# Ammonium iron(II) sulfate standard solution 2.8 mmol/I according to EN ISO 7393-1:2000,

DEV G4-1 adv

Revision date: 28.04.2022

Product code: 20710

Page 2 of 8

# SECTION 4: First aid measures

## 4.1. Description of first aid measures

# **General information**

No data available

After inhalation

Provide fresh air.

### After contact with skin

Wash immediately with: Water Take off immediately all contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

#### After ingestion

Rinse mouth immediately and drink plenty of water. Call a doctor if you feel unwell.

#### 4.2. Most important symptoms and effects, both acute and delayed

No data available

## 4.3. Indication of any immediate medical attention and special treatment needed

No data available

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

## Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

# Unsuitable extinguishing media

no restriction

#### 5.2. Special hazards arising from the substance or mixture

Non-combustible liquids Hazardous combustion products In case of fire may be liberated: Sulphur oxides Nitrogen oxides (NOx)

## 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

# Additional information

Suppress gases/vapours/mists with water spray jet.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Remove persons to safety. Emergency procedures Do not breathe dust/fume/gas/mist/vapours/spray.



Ammonium iron(II) sulfate standard solution 2.8 mmol/l according to EN ISO 7393-1:2000, DEV G4-1 adv				
Revision date: 28.04.2022	Product code: 20710	Page 3 of 8		
For emergency responders Precautionary statements For emerg	jency responders : Personal protection equipment: see s	section 8		
<u>6.2. Environmental precautions</u> Do not allow to enter into surface water or drains.				
6.3. Methods and material for containment and cleaning up				
For containment				
Wipe up with absorbent material (eg. cloth, fleece).				
For cleaning up				
Clean contaminated articles and floor according to the environmental legislation.				
Other information				
Provide adequate ventilation. Do not breathe dust/fume/gas/mist/v Wear breathing apparatus if exposed	· · · ·			
<u>6.4. Reference to other sections</u> Safe handling: see section 7				

Personal protection equipment: see section 8 Disposal: see section 13

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

## Advice on safe handling

Read label before use.

# Advice on protection against fire and explosion

Usual measures for fire prevention.

# Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

#### Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. Take off immediately all contaminated clothing and wash it before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Corrosive to metals. Unsuitable container/equipment material: Metal, Light metal The product develops hydrogen in an aqueous solution in contact with metals.

# Further information on storage conditions

Keep container tightly closed.

## 7.3. Specific end use(s)

Laboratory chemicals

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# 8.2. Exposure controls



# Ammonium iron(II) sulfate standard solution 2.8 mmol/I according to EN ISO 7393-1:2000,

Revision date: 28.04.2022

DEV G4-1 adv Product code: 20710

Page 4 of 8

## Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

# Individual protection measures, such as personal protective equipment

#### Eye/face protection

goggles Wear eye/face protection.

#### Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

#### By long-term hand contact

Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact

Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

# Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

# **Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation

### Environmental exposure controls

Discharge into the environment must be avoided.

### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

n mormation on bable physical and chemical properties			
Physical state: Colour:	Liquid clear		
Odour:	odourless		
Odour threshold:	No data available		
Changes in the physical state			
Melting point/freezing point:		No data available	
Boiling point or initial boiling point and		No data available	
boiling range:			
Sublimation point:		No data available	
Softening point:		No data available	
Pour point:		No data available	
No data available:			



Ammonium iron(II) sulfate standard solution 2.8 mmol/I according to EN ISO 7393-1:2000,			
Devision data: 00.04.0000	DEV G4-1 adv		
Revision date: 28.04.2022	Product code: 20710	Page 5 of 8	
Flash point:	No data available		
Flammability			
Solid/liquid:	No data available		
Gas:	No data available		
Explosive properties No data available			
Lower explosion limits:	No data available		
Upper explosion limits:	No data available		
Auto-ignition temperature:	No data available		
Self-ignition temperature			
Solid:	No data available		
Gas:	No data available		
Decomposition temperature:	No data available		
pH-Value:	acidic		
Viscosity / dynamic:	No data available		
Viscosity / kinematic:	No data available		
Flow time:	No data available		
Water solubility:	completely miscible		
Solubility in other solvents No data available			
Partition coefficient n-octanol/water:	No data available		
Vapour pressure:	No data available		
Vapour pressure:	No data available		
Density:	0,99924 g/cm³		
Bulk density:	No data available		
Relative vapour density:	No data available		
9.2. Other information			
Information with regard to physical hazard classes Sustaining combustion:	No data available		
Oxidizing properties Oxidizing			
Other safety characteristics			
Solvent separation test:	No data available		
Solvent content:	No data available		
Solid content:	0		
Evaporation rate:	No data available		
Further Information			
Corrosive to metals.			
SECTION 10: Stability and reactivity			

# SECTION 10: Stability and reactivity

# 10.1. Reactivity

Corrosive to metals.

# 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.



# Ammonium iron(II) sulfate standard solution 2.8 mmol/I according to EN ISO 7393-1:2000,

DEV G4-1 adv

Revision date: 28.04.2022

Product code: 20710

Page 6 of 8

#### 10.3. Possibility of hazardous reactions

#### Metal

The product develops hydrogen in an aqueous solution in contact with metals.

#### 10.4. Conditions to avoid

No data available

#### 10.5. Incompatible materials

### Cellulose Metal

The product develops hydrogen in an aqueous solution in contact with metals.

# 10.6. Hazardous decomposition products

In case of fire may be liberated:

SECTION 5: Firefighting measures

#### Further information

No data available

# SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Toxicocinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

#### Acute toxicity

Based on available data, the classification criteria are not met.

## Irritation and corrosivity

Based on available data, the classification criteria are not met.

#### Sensitising effects

Based on available data, the classification criteria are not met.

### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

### STOT-repeated exposure

Based on available data, the classification criteria are not met.

## Aspiration hazard

Based on available data, the classification criteria are not met.

#### Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

## Additional information on tests

There are no data available on the preparation/mixture itself.

#### Practical experience

There are no data available on the preparation/mixture itself.

## 11.2. Information on other hazards

## Other information

There are no data available on the preparation/mixture itself.

#### **Further information**

There are no data available on the preparation/mixture itself.

## **SECTION 12: Ecological information**

#### 12.1. Toxicity



### Ammonium iron(II) sulfate standard solution 2.8 mmol/l according to EN ISO 7393-1:2000, DEV G4-1 adv Revision date: 28.04.2022 Product code: 20710 Page 7 of 8 There are no data available on the mixture itself. 12.2. Persistence and degradability There are no data available on the mixture itself 12.3. Bioaccumulative potential There are no data available on the mixture itself. 12.4. Mobility in soil There are no data available on the mixture itself. 12.5. Results of PBT and vPvB assessment The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. 12.6. Endocrine disrupting properties This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria. 12.7. Other adverse effects Discharge into the environment must be avoided. Further information There are no data available on the mixture itself. **SECTION 13: Disposal considerations** 13.1. Waste treatment methods **Disposal recommendations** Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Contaminated packaging The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. **SECTION 14: Transport information** Land transport (ADR/RID) 14.1. UN number or ID number: No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: No dangerous good in sense of this transport regulation. 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation. 14.4. Packing group: No dangerous good in sense of this transport regulation. Inland waterways transport (ADN) 14.1. UN number or ID number: No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. 14.3. Transport hazard class(es): 14.4. Packing group: No dangerous good in sense of this transport regulation. Marine transport (IMDG) 14.1. UN number or ID number: No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: No dangerous good in sense of this transport regulation. 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

14.4. Packing group:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

<u>14.4. Packing group:</u> Air transport (ICAO-TI/IATA-DGR) <u>14.1. UN number or ID number:</u>



Ammonium iron(II) sulfate standard solution 2.8 mmol/I according to EN ISO 7393-1:2000, DEV G4-1 adv					
Revision date: 28.04.2022	Product code: 20710	Page 8 of 8			
ENVIRONMENTALLY HAZARDOUS:	No				
14.6. Special precautions for user					
No dangerous good in sense of this t	No dangerous good in sense of this transport regulation.				
14.7. Maritime transport in bulk according	to IMO instruments				
No dangerous good in sense of this transport regulation.					
SECTION 15: Regulatory information					
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture					
EU regulatory information					
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)				
National regulatory information					
Employment restrictions:	Observe restrictions to employment for juveniles accordi work protection guideline' (94/33/EC).	ng to the 'juvenile			
Water hazard class (D):	non-hazardous to water				
SECTION 16: Other information					

### Changes

This data sheet contains changes from the previous version in section(s): 2,4,5,6,8,9,12,13,14,15.

## **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)